Journal of Non-Crystalline Solids 71 (1985) 447–449
North-Holland, Amsterdam

AUTHOR INDEX

Abe, Y., see Hosono 261
Abraham, M.M., see Sales 103
Antonini, M., A.E. Merlini and R.F. Thornley, EXAFS structures of technetium in glasses prepared under different redox conditions 219
Araujo, R.J., The influence of quenching on the color of certain glasses containing copper 227

Balazs, G.B., see Schreiber 59
Baltă, P., C. Spurcaciu, D. Radu and O. Dumitrescu, The influence of the melting conditions on the basicity of glasses 69
Bates, J.B., see Sales 103
Beier, W., see Frischat 77
Boatner, L.A., see Sales 103
Bonner, F.J., G. Kordas and D.L. Kinser, Sol–gel glasses by non-aqueous processes 361
Bray, P.J. and E.J. Holupka, The potential of NMR techniques for studies of the effects of thermal history on glass structure 411
Brinker, C.J., E.P. Roth, G.W. Scherer and D.R. Tallant, Structural evolution during the gel to glass conversion 171
Brückner, R., Redox ratio shifts and electrical transport properties in redox pairs containing glasses 49
Brückner, R., see Sammet 253
Buffat, Ph., see Châtelain 335

Châtelain, A., Ph. Buffat, P. Stadelmann and R.A. Weeks, Precipitation of small iron particles in amorphous silica: ferromagnetic resonance experiments 335
Cooper, A.R., Continuous cooling from a high initial temperature through a freezing-in transition 5

Davé, S. and R.K. Maccrone, Magnetic properties of sol–gel glasses containing titanium ions 303
Davis, E.A., Defects and associated electronic states in amorphous semiconductors 113
Day, D.E., see Dutt 125
Dumitrescu, O., see Baltă 69
Dutt, M.B. and D.E. Day, Origin of thermally stimulated currents in oxide glasses 125

Fathy, D., see Holland 163
Freund, F., Conversion of dissolved "water" into molecular hydrogen and peroxy linkages 195
Friebele, E.J., D.L. Griscom and M.J. Marrone, The optical absorption and luminescence bands near 2 eV in irradiated and drawn synthetic silica 133
Friebele, E.J., D.L. Griscom and T.W. Hickmott, Nitrogen-associated paramagnetic defect centers in sputtered SiO_2 films 351
Friebele, E.J., see Wolf 345
Frischat, G.H. and W. Beier, Influence of preparation conditions on diffusion in glasses 77

Galeener, F.L., Raman and ESR studies of the thermal history of amorphous SiO_2 373
Greaves, G.N., EXAFS and the structure of glass 203
Griscom, D.L., see Friebele 133
Griscom, D.L., see Friebele 351

0022-3093/85/$03.30 © Elsevier Science Publishers B.V.
(North-Holland Physics Publishing Division)

Gupta, P.K., A generalized theory of compositional changes and structural relaxation in amorphous materials 29

Hickmott, T.W., see Friebele 351
Hoff, R., see Seebaugh 387
Holland, O.W., D. Fathy, J. Narayan, T.P. Sjoreen and S.R. Wilson, Optimized conditions for the formation of buried insulating layers in Si by high dose implantation of oxygen 163
Holupka, E.J., see Bray 411
Hosono, H., Y. Abe and H. Kawazoe, ESR study of radiation induced paramagnetic defect centers localized on a phosphorus in binary phosphate glasses 261
Hughes, H.L., see Revesz 87

Inoue, H., see Yasui 39
Ito, S., see Sakka 311

Jolley, J.G., see Mittl 287

Kamiya, K., see Sakka 311
Kamiya, K., see Yoko 245
Kanazawa, T., see Watanabe 279
Kawazoe, H., Effect of modes of glass-formation on structure of intrinsic or photon induced defects centered on III, IV or V cations in oxide glasses 231
Kawazoe, H., see Hosono 261
Kawazoe, H., see Watanabe 279
Kelsey Jr., P.V., see Mittl 287
Kerner, R., Geometrical approach to the glass transition problem 19
Kinser, D.L., see Bonner 361
Kinser, D.L., see Kordas 157
Kinser, D.L., see Magruder 95
Kinser, D.L., see Seebaugh 387
Klein, L.C., see Kordas 327
Kordas, G., R.A. Weeks and D.L. Kinser, Paramagnetic conduction electrons in GeS_x-glasses 157
Kordas, G., R.A. Weeks and L.C. Klein, Electron-spin-resonance (ESR) study of sol–gel glasses 327
Kordas, G., see Bonner 361
Kreidl, N., Epitome 1
Kushiro, I., S.K. Sharma and D.W. Matson, Effect of high pressures on the structure of anhydrous and hydrated GeO_2 glasses 429

Leadbetter, A.J., see Wright 295

MacCrone, R.K., see Davé 303
Magruder, R.H., D.L. Kinser and R.A. Weeks, Fusion temperature effects on the annealing behavior of GeO_2 glasses as measured by the dc resistivity 95
Marrone, M.J., see Friebele 133
Matson, D.W., see Kushiro 429
Matson, D.W., see Sharma 403
Merlini, A.E., see Antonini 219
Mittl, J.C., R.L. Tallman, P.V. Kelsey Jr and J.G. Jolley, HIP Glassmaking for high nitrogen compositions in the Y–Si–Al–O–N system 287
Mukherjee, S.P. and S.K. Sharma, A comparative Raman study of the structure of conventional and gel-derived glasses in the SiO_2–GeO_2 system 317

Narayan, J., see Holland 163

Paul, A., Effect of thermal stabilization on redox equilibria and colour of glass 269

Philpotts, J.A., see Sharma 403

Rabinovich, E.M., Alkoxide and colloidal silica gels and glasses: a comparison 187
Radu, D., see Baltă 69
Revesz, A.G. and H.L. Hughes, The structure of thermally grown noncrystalline SiO_2 films on silicon 87
Roth, E.P., see Brinker 171

Sakka, S., S. Ito and K. Kamiya, Electronic spectra of transition metal ions in gel-derived and melt-derived glasses 311
Sakka, S., see Yoko 245
Sales, B.C., M.M. Abraham, J.B. Bates and L.A. Boatner, Structural properties of lead–iron phosphate glasses 103
Sammet, M. and R. Brückner, Optical absorption and electron spin resonance in vanadium-containing phosphate and fluoride phosphate glasses 253
Scherer, G.W., see Brinker 171
Schreiber, H.D. and G.B. Balazs, An electromotive force series for redox couples in a borosilicate melt: the basis for electron exchange interactions of the redox couples 59
Seebaugh, W.R., D.L. Kinser, R. Hoff and R.A. Weeks, Cooling and crystallization rates of Libyan Desert Glass 387
Sharma, S.K., see Kushiro 429
Sharma, S.K., see Mukherjee 317
Sharma, S.K., J.A. Philpotts and D.W. Matson, Ring distributions in alkali- and alkaline-earth aluminosilicate framework glasses – a Raman spectroscopic study 403
Shimizu, T., Nature of defects in amorphous Ge–S and Si–N 145
Silin, A.R. and L.N. Skuja, Intrinsic defects in fused silica 443
Sinclair, R.N., see Wright 295
Sjoreen, T.P., see Holland 163
Skuja, L.N., see Silin 443
Spurcaciu, C., see Baltă 69
Stadelmann, P., see Châtelain 335

Tallant, D.R., see Brinker 171
Tallman, R.L., see Mittl 287
Tao, Y., see Wang 397
Thornley, R.F., see Antonini 227
Tran, D.C., see Wolf 345

Wang, C. and Y. Tao, The influence of boron ion-implantation on silica and lead glasses 397
Watanabe, Y., T. Kanazawa and H. Kawazoe, Structure of radiation-induced ESR centers in nitrogen-containing phosphate glasses 279
Weeks, R.A., Some effects of pulsed CO_2 laser heating of silica 435
Weeks, R.A., see Châtelain 335
Weeks, R.A., see Kordas 157
Weeks, R.A., see Kordas 327
Weeks, R.A., see Magruder 95
Weeks, R.A., see Seebaugh 387
Wilson, S.R., see Holland 163
Wolf, A.A., E.J. Friebele and D.C. Tran, EPR spectra of gel-to-glass reactions 345
Wright, A.C., R.N. Sinclair and A.J. Leadbetter, Effect of preparation method on the structure of amorphous solids in the system As–S 295

Yasui, I. and H. Inoue, Molecular dynamic simulations of changes in structure in ZrF_4 based glasses 39
Yoko, T., K. Kamiya and S. Sakka, Oxidation state of copper ions in silicate glasses prepared by different methods 245

Journal of Non-Crystalline Solids 71 (1985) 451–456
North-Holland, Amsterdam

SUBJECT INDEX

Amorphous Solids
Glass Transition, Kinetics, Thermodynamics 5
Glass Transition, Sol–gel method 1
Semiconductors, Electron Spin Resonance, Chalcogenides 145
Semiconductors, Silica, Electrical Properties and Relaxation 113

Borates
Ion Implantation, Silicates, Silica 397
Silicates, Oxides, Structure 59

Chalcogenides
Amorphous Solids, Semiconductors, Electron Spin Resonance 145
Electron Spin Resonance, Germanates, Non-oxide Glasses 157
Neutron Diffraction, Structure, Non-oxide Glasses 295

Computer Simulation
X-ray Diffraction, Structure, Non-oxide Glasses 39

Crystallization
Silica, Glass Transition, Glass Formation 387

Dielectric Properties
Ionic Conductivity, Electrical Properties and Relaxation, Transport Properties – Solids 125

Diffusion
Transport Properties – Solids, Liquids, Silica 77

Electrical Properties and Relaxation
Amorphous Solids, Semiconductors, Silica 113
Ionic Conductivity, Dielectric Properties, Transport Properties – Solids 125

Electron Spin Resonance
Amorphous Solids, Semiconductors, Chalcogenides 145
Germanates, Chalcogenides, Non-oxide Glasses 157
Lasers, Silica, Splat-cooling 435
Magnetic Properties, Silica, Glasses Containing Transition Metal Ions 335
Optical Properties, Phosphates, Glasses Containing Transition Metal Ions 253
Oxides, Radiation Effects, Transport Properties – Solids 231
Phosphates, Radiation Effects 279
Phosphates, Relaxation 261
Silica, Radiation Effects, Optical Properties 133
Silica, Thin Films, Relaxation 351
Sol–gel Method, Nuclear Magnetic Resonance, Glasses Containing Transition Metal Ions 303
Sol–gel Method, Silica 327, 345

Electronic Conductivity
Transport Properties – Solids, Glasses Containing Transition Metal Ions 49

0022-3093/85/$03.30 © Elsevier Science Publishers B.V.
(North-Holland Physics Publishing Division)

Entropy
Impurity Conduction, Germania, Transport Properties – Solids 95

EXAFS
Silica, Structure, Glasses Containing Transition Metal Ions 203
Silicates, Structure, Glasses Containing Transition Metal Ions 219

Germanates
Electron Spin Resonance, Chalcogenides, Non-oxide Glasses 157
Raman Spectra, Sol–gel Method, Silica 317

Germania
Ionic Conductivity, Entropy, Transport Properties – Solids 95
Raman Spectra, Pressure Effects, Water in Glass 429

Glass Formation
Glass Transition, Phase Transition, Thermodynamics 19
Silica, Glass Transition, Crystallization 387

Glass Transition
Amorphous Solids, Sol–gel method 1
Kinetics, Thermodynamics, Amorphous Solids 5
Optical Properties, Silicates, Glasses Containing Transition Metal Ions 227
Optical Properties, Thermodynamics, Glasses Containing Transition Metal Ions 269
Phase Transition, Thermodynamics, Glass Formation 19
Pressure Effects, Phase Separation, Oxides 287
Silica, Glass Formation, Crystallization 387
Silica, Raman Spectra, Structure 373
Sol–gel Method, Structure, Thermodynamics 171

Glasses Containing Transition Metal Ions
Electron Spin Resonance, Magnetic Properties, Silica 335
Electronic Conductivity, Transport Properties – Solids 49
EXAFS, Silica, Structure 203
EXAFS, Silicates, Structure 219
Glass Transition, Optical Properties, Silicates 227
Optical Properties, Electron Spin Resonance, Phosphates 253
Optical Properties, Thermodynamics, Glass Transition 269
Phosphates, Magnetic Properties, Kinetics 103
Silicates, Sol–gel Method, Silica 311
Sol–gel method, Electron Spin Resonance, Nuclear Magnetic Resonance 303

Infra-red Absorption
Silica, Ultraviolet Absorption, Oxides 69

Ion Exchange
Silicates 248

Ion Implantation
Semiconductors, Thin Films, Silica 163
Silicates, Silica, Borates 397

Ionic Conductivity
Electrical Properties and Relaxation, Dielectric Properties, Transport Properties – Solids 125
Germania, Entropy, Transport Properties – solids 95

Kinetics
Glass Transition, Thermodynamics, Amorphous Solids 5

Phase Transition, Nucleation, Thermodynamics 29
Phosphates, Metallic Glasses, Glasses Containing Transition Metal Ions 103

Lasers
Silica, Electron Spin Resonance, Splat-cooling 435

Liquids
Transport Properties – Solids, Diffusion, Silica 77

Magnetic Properties
Electron Spin Resonance, Silica, Glasses Containing Transition Metal Ions 335
Phosphates, Kinetics, Glasses Containing Transition Metal Ions 103

Neutron Diffraction
Chalcogenides, Structure, Non-oxide glasses 295

Non-oxide Glasses
Electron Spin Resonance, Germanates, Chalcogenides 157
Neutron Diffraction, Chalcogenides, Structure 295
X-ray Diffraction, Computer Simulation, Structure 39

Nuclear Magnetic Resonance
Sol–gel method, Electron Spin Resonance, Glasses Containing Transition Metal Ions 303
Structure 411

Nucleation
Kinetics, Phase Transition, Thermodynamics 29

Optical Properties
Electron Spin Resonance, Phosphates, Glasses Containing Transition Metal Ions 253
Glass Transitions, Silicates, Glasses Containing Transition Metal Ions 227
Silica, Radiation Effects, Electron Spin Resonance 133
Silica, Structure, 443
Thermodynamics, Glass Transition, Glasses Containing Transition Metal Ions 269

Oxides
Electron Spin Resonance, Radiation Effects, Transport Properties – Solids 231
Pressure Effects, Phase Separation, Glass Transition 287
Silica, Ultraviolet Absorption, Infra-red Absorption 69
Silicates, Beryllium Fluoride, Structure 59
Silicates, Transport Properties – Solids 195

Phase Separation
Pressure Effects, Glass Transition, Oxides 287

Phase Transition
Glass Transition, Thermodynamics, Glass Formation 19
Kinetics, Nucleation, Thermodynamics 29

Phosphates
Electron Spin Resonance, Radiation Effects 279
Electron Spin Resonance, Relaxation 261
Magnetic Properties, Kinetics, Glasses Containing Transition Metal Ions 103
Optical Properties, Electron Spin Resonance, Glasses Containing Transition Metal Ions 253

Porosity
Sol–gel Method, Silica 187

Pressure Effects
Germania, Raman Spectra, Water in Glass 429
Phase Separation, Glass Transition, Oxides 287

Radiation Effects
Electron Spin Resonance, Oxides, Transport Properties – Solids 231
Electron Spin Resonance, Phosphates 279
Silica, Optical Properties, Electron Spin Resonance 133

Raman Spectra
Germania, Pressure Effects, Water in Glass 429
Silica, Glass Transition, Structure 373
Silicates, Structure 403
Sol–gel Method, Germanates, Silica 317

Relaxation
Electron Spin Resonance, Phosphates 261
Electron Spin Resonance, Silica, Thin Films 351

Semiconductors
Amorphous Solids, Electron Spin Resonance, Chalcogenides 145
Amorphous Solids, Silica, Electrical Properties and Relaxation 113
Ion Implantation, Thin Films, Silica 163

Silica
Amorphous Solids, Semiconductors, Electrical Properties and Relaxation 113
Electron Spin Resonance, Magnetic Properties, Glasses Containing Transition Metal Ions 335
Electron Spin Resonance, Sol–gel Method 327, 345
Electron Spin Resonance, Thin Films, Relaxation 351
EXAFS, Structure, Glasses Containing Transition Metal Ions 203
Glass Transition, Glass Formation, Crystallization 373
Ion Implantation, Semiconductors, Thin Films 163
Ion Implantation, Silicates, Borates 397
Lasers, Electron Spin Resonance, Splat-cooling 435
Optical Properties, Structure 443
Radiation Effects, Optical Properties, Electron Spin Resonance 133
Raman Spectra, Glass Transition, Structure 373
Raman Spectra, Sol–gel Method, Germanates 317
Silicates, Sol–gel Method, Glasses Containing Transition Metal Ions 311
Sol–gel Method 361
Sol–gel Method, Porosity 187
Transport Properties – Solids, Diffusion, Liquids 77
Transport Properties – Solids, Thin Films 87
Ultraviolet Absorption, Infra-red absorption, Oxides 69

Silicates
Borates, Oxides, Structure 59
EXAFS, Structure, Glasses Containing Transition Metal Ions 219

Glass Transition, Optical Properties, Glasses Containing Transition Metal Ions 227
Ion Exchange 245
Ion Implantation, Silica, Borates 397
Oxides, Transport Properties – Solids 195
Raman Spectra, Structure 403
Sol–gel Method, Silica, Glasses Containing Transition Metal Ions 311

Sol–gel Method
Electron Spin Resonance, Nuclear Magnetic Resonance, Glasses Containing Transition Metal Ions 303
Electron Spin Resonance, Silica 327, 345
Glass Transition, Amorphous Solids 1
Raman Spectra, Germanates, Silica 317
Silica 361
Silica, Porosity 187
Silicates, Silica, Glasses Containing Transition Metal Ions 311
Structure, Thermodynamics, Glass Transition 171

Splat-cooling
Lasers, Silica, Electron Spin Resonance 435

Structure
EXAFS, Silica, Glasses Containing Transition Metal Ions 203
EXAFS, Silicates, Glasses Containing Transition Metal Ions 219
Neutron Diffraction, Chalcogenides, Non-oxide Glasses 295
Nuclear Magnetic Resonance 411
Raman Spectra, Silicates 403
Silica, Optical Properties 443
Silica, Raman Spectra, Glass Transition 373
Silicates, Borates, Oxides 59
Sol–gel Method, Thermodynamics, Glass Transition 171
X-ray Diffraction, Computer Simulation, Non-oxide Glasses 39

Thermodynamics
Glass Transition, Kinetics, Amorphous Solids 5
Glass Transition, Phase Transition, Glass Formation 19
Kinetics, Phase Transition, Nucleation 29
Optical Properties, Glass Transition, Glasses Containing Transition Metal Ions 269
Sol–gel Method, Structure, Computer Simulation 171

Thin Films
Electron Spin Resonance, Silica, Relaxation 351
Ion Implantation, Semiconductors, Silica 163
Silica, Transport Properties – Solids 87

Transport Properties–Solids
Diffusion, Liquids, Silica 77
Electron Spin Resonance, Oxides, Radiation Effects 231
Electronic Conductivity, Glasses Containing Transition Metal Ions 49
Ion Conductivity, Electrical Properties and Relaxation, Dielectric Properties 125
Ionic Conductivity, Germania, Entropy 95
Oxides, Silicates 195
Silica, Thin Films 87

Ultraviolet Absorption
Silica, Infra-red Absorption, Oxides 69

Water in Glass
Germania, Raman Spectra, Pressure Effects 429

X-ray Diffraction
Computer Simulation, Structure, Non-oxide Glasses 39